

OPTIONAL LENSES

Independent catalogue is available for detailed specifications and dimensions of Elmo micro camera lenses.

For QP49H

Code	Type	Focal length	F stop
9821	QT282AS	2.2mm	2.8
9812	QT254	4mm	2.5
9813	QT288	8mm	2.8
9831	QT3515	15mm	3.5

Macro lens for machine vision

Code	Type	Focal length	Magnifications
9831-1	QT3515K	15mm	x0.30~

For UP50H

Code	Type	Focal length	F stop
9289	TT203	3mm	2.0
9283	TT1655	5.5mm	1.6
9288	TT2011	11mm	2.0
9295	TT3318	18mm	3.3

OPTIONAL CAMERA CABLES

For UP50H/MP50H

- QP49H is supplied with 3.5m permanently attached cable

Code	Type	Nominal length
9833	EMC-02H	2m
9833-1	EMC-03H	3m
9833-2	EMC-05H	5m
9833-3	EMC-12H	12m
9833-4	EMC-20H	20m
9833-5	EMC-30H	30m

For MP50H

Code	Type	Focal length	F stop
8771	T183	3mm	1.8
9264	T204D	4mm	2.0
9250	T1675F	7.5mm	1.6
9265	T2015D	15mm	2.0
9266	T3124	24mm	3.1
9819	T4536	36mm	4.5
9267	T287P Pinhole	7mm	2.8

Macro lenses for machine vision

Code	Type	Focal length	Magnifications
8797	T3425M	25mm	x0.38~x0.49
8797-1	T3425MB	25mm	x0.33~x0.67
8797-2	T3425MC	25mm	x0.66~x1.00
9271-2	T416M	16mm	x1.41~x1.57
9271	T416MA	16mm	x1.60~x2.50
9271-1	T416MB	16mm	x1.10~x1.60
9832	TMZ409M Zoom	23mm~57mm	x0.2~x0.8

OTHER OPTIONALS

- AC adapter with AC cord
- C-mount adapter for MP50H

ELMO

CCD COLOUR REMOTE-HEAD CAMERAS

QP49H • UP50H • MP50H & CC501



New ELMO Colour remote-head camera systems are available in three types camera heads of

- ϕ 7mm super-micro QP49H,
- ϕ 12mm pen-size micro UP50H,
- ϕ 17mm lipstick-size micro MP50H

and a camera control unit CC501 which may be used with any of the camera heads shown above.

With features like high-resolution CCD chips (480,000 pixels) in the camera heads and DSP circuitry with on-screen display in the CC501 controller, the new ELMO remote-head camera system offers superior performance, high quality and unlimited applications.

ELMO

the technological innovator since 1921

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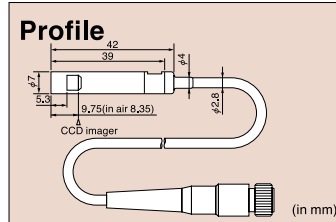
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480,000pixels CCD Colour Camera Heads

QP49H

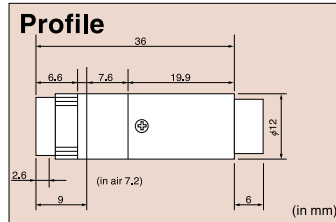
- The thinnest camera available in the market. Only 7mm diameter
- 480,000 pixels Colour 1/4" CCD for more than 470 TV (H) lines of resolution
- 3.5m camera cable (φ2.8mm) attached
- A variety of optional lenses available



(Actual size with optional lens)

UP50H

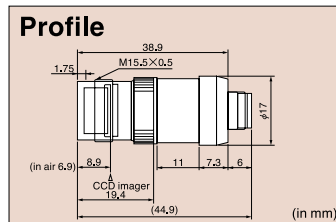
- The most convenient-sized camera with 12mm diameter
- 480,000 pixels Colour 1/3" CCD for more than 470 TV (H) lines of resolution
- 3.5 lx low-light sensitivity
- Optional camera cables available in lengths up to 30m
- A variety of optional lenses available



(Actual size with optional lens and camera cable)

MP50H

- The best cost-performance miniature camera with 17mm diameter
- 480,000 pixels Colour 1/2" CCD for more than 470 TV (H) lines of resolution
- 2.5 lx low-light sensitivity
- Optional camera cables available in lengths up to 30m
- A variety of optional lenses available



(Actual size with optional lens and camera cable)

SPECIFICATIONS

Model	QP49H	UP50H	MP50H
Image sensor	1/4" IT-CCD	1/3" IT-CCD	1/2" IT-CCD
Effective pixels	Horizontal: 752 pixels, Vertical: 582 pixels		
Effective image area	Horizontal: 3.65 mm, Vertical: 2.71 mm	Horizontal: 4.89 mm, Vertical: 3.64 mm	Horizontal: 6.47 mm, Vertical: 4.83 mm
Resolution	Horizontal: More than 470 lines, Vertical: More than 420 lines		
Standard intensity of illumination for objects	200 lx (F2.5, 3000K)	40 lx (F1.6, 3000K)	30 lx (F1.6, 3000K)
Minimum intensity of illumination for objects	20 lx (F2.5, 3000K)	3.5 lx (F1.6, 3000K)	2.5 lx (F1.6, 3000K)
S/N ratio	46 dB or more		
Camera cable length	3.5m		
Weight	68g (2.4oz) (including cable)	9g (0.3oz)	18g (0.6oz)

Design and specifications are subject to change without notice.

& DSP Camera Control Unit

CC501

- Accepts QP49H/UP50H/MP50H camera heads without requiring readjustment
- Digital Signal Processing (DSP) circuit
- Convenient On-Screen Display
- Selectable measurement area for white balance, AGC and auto electronic shutter settings
- Screen File function to store two menu settings and to recall the specific mode immediately
- AES (Automatic Electronic Shutter) plus manual shutter-speed settings
- Composite and S-Video outputs plus Genlock



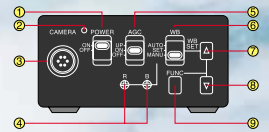
SPECIFICATIONS (CC501 with MP50H)

Power supply	DC12V ± 0.5V
Power consumption	360 mA
Image sensor	1/2" IT-CCD
Effective pixels	Horizontal: 752 pixels, Vertical: 582 pixels
Effective image area	Horizontal: 6.47 mm, Vertical: 4.83 mm (1/2" type)
Scanning system	2:1 interlace
Scan frequency	Horizontal: 15.625 kHz, Vertical: 50 Hz
Sync system	Internal/External (automatic switching)
Resolution	Horizontal: More than 470 lines, Vertical: More than 420 lines
Standard intensity of illumination for objects	30 lx (F1.6, 3000K)
Minimum intensity of illumination for objects	2.5 lx (F1.6, 3000K)
S/N ratio	46 dB or more
Video output	VBS 1.0 V(p-p), (BNC terminal) PAL system Y/C separation output (S terminal)
Output impedance	75Ω unbalanced
External sync input	VBS 1.0 V(p-p) (BNC terminal) PAL 75Ω unbalanced
Adjustment function	Subcarrier phase, H phase
White balance	Automatic/set/manual
Gain switch (AGC)	SENS UP (+6 dB)/ON/OFF
Electronic shutter	Automatic, 1/50s, 1/120s, 1/250s, 1/500s, 1/1000s, 1/2000s, 1/4000s, 1/10000s, synchronized scan
Operating temperature/humidity	-10°C to +40°C (14°F to 104°F)/Less than 90%
Weight	Control unit: 390g (0.86 lbs)
Dimensions (Without protrusion)	Control unit: W: 85 mm, H: 40mm, D: 156mm (W: 3.35", H: 1.57", D: 6.14")

Specifications with micro camera head (MP50H) connected.
Design and specifications are subject to change without notice.

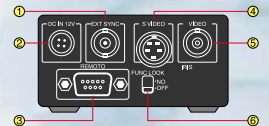
Front panel

- ① POWER switch
- ② POWER indicator
- ③ CAMERA terminal
- ④ White balance adjust control
- ⑤ AGC switch
- ⑥ WB switch
- ⑦ UP button
- ⑧ DOWN button
- ⑨ FUNC button



Rear panel

- ① EXT SYNC terminal
- ② DC IN 12V terminal
- ③ REMOTE terminal
- ④ S-VIDEO terminal
- ⑤ VIDEO terminal
- ⑥ FUNC LOCK switch



Profile

